

RESEARCH, DEVELOPMENT & TECHNOLOGY TRANSFER QUARTERLY PROGRESS REPORT

Wisconsin Department of Transportation
DT1241 02/2011

INSTRUCTIONS:

Research project investigators and/or project managers should complete a quarterly progress report (QPR) for each calendar quarter during which the projects are active.

WisDOT research program category: <input type="checkbox"/> Policy research <input type="checkbox"/> Other		<input checked="" type="checkbox"/> Wisconsin Highway Research Program <input type="checkbox"/> Pooled fund TPF#	Report period year: 2013 <input type="checkbox"/> Quarter 1 (Jan 1 – Mar 31) <input type="checkbox"/> Quarter 2 (Apr 1 – Jun 30) <input type="checkbox"/> Quarter 3 (Jul 1 – Sep 30) <input checked="" type="checkbox"/> Quarter 4 (Oct 1 – Dec 31)
Project title: Laboratory Study of High Performance Curing Compounds for Concrete Pavement-Phase II			
Project investigator: Steven Cramer		Phone: 608-265-2001	E-mail: cramer@engr.wisc.edu
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WisDOT contact: Kimberley Dinkins		Phone: (608) 267-2828	E-mail: KimberleyR.Dinkins@dot.wi.gov
WisDOT project ID: 0092-11-05		Other project ID:	Project start date: 9/1/2012
Original end date: 9/30/2014		Current end date: 9/30/2014	Number of extensions: 0

Project schedule status:

☐ On schedule ☐ On revised schedule ☐ Ahead of schedule ☒ Behind schedule

Project budget status:

Total Project Budget	Expenditures Current Quarter	Total Expenditures	% Funds Expended	% Work Completed
\$150,004.00	\$14,463.56	\$57,851.56	39%	55%

Project description:

The primary objective of this study is to determine the effect that the presence of bleed water on the surface of concrete has on the effectiveness of curing compounds with regards to freeze-thaw surface durability and to provide recommendations on when curing compounds should be applied. A secondary objective of this study is to determine the repeatability of in assessing curing compound performance and to identify the trade-offs in curing compound performance with regards to surface durability.

Progress this quarter (includes meetings, work plan status, contract status, significant progress, etc.):

In this quarter it was determined that one coarse aggregate that had been reliably supplied in the past did not meet WisDOT specifications. This aggregate was removed from our facilities and through the assistance of WCPA contractors, a replacement aggregate was quickly obtained, tested for compliance and incorporated into the research program. Approximately 50% of all specimens have been manufactured to date and approximately 10% of all freeze-thaw specimens have completed their 60 ASTM C672 exposure cycles. The project team meets every other week at a minimum.

Anticipated work next quarter:

Our goal is to complete the manufacture of all specimens during the next quarter and work them into the f/t test environment in the UW-Madison Biotron. We will begin to analyze the data.

Circumstances affecting project or budget:

As mentioned above, one coarse aggregate source was found to be out of WisDOT spec and was replaced at a rather critical time in the project. This activity included removal of previous aggregate and material data testing on the new

aggregate. This combined with the previous delay related to the Biotron F/T test facility has placed the project several months behind schedule. The aggregate problem did not allow us the opportunity to make up for any of the previous lost time. The project has progressed past these two difficulties at this time and is proceeding. It seems inevitable that a no-cost extension will be necessary to complete this project but we are waiting to see what time can be regained or whether additional difficulties arise.

Attach / insert Gantt chart and other project documentation

See attached Gantt chart.

FOR WISDOT USE ONLY

Staff receiving QPR: K. Dinkins	Date received: 1/8/14
Staff approving QPR:	Date approved: